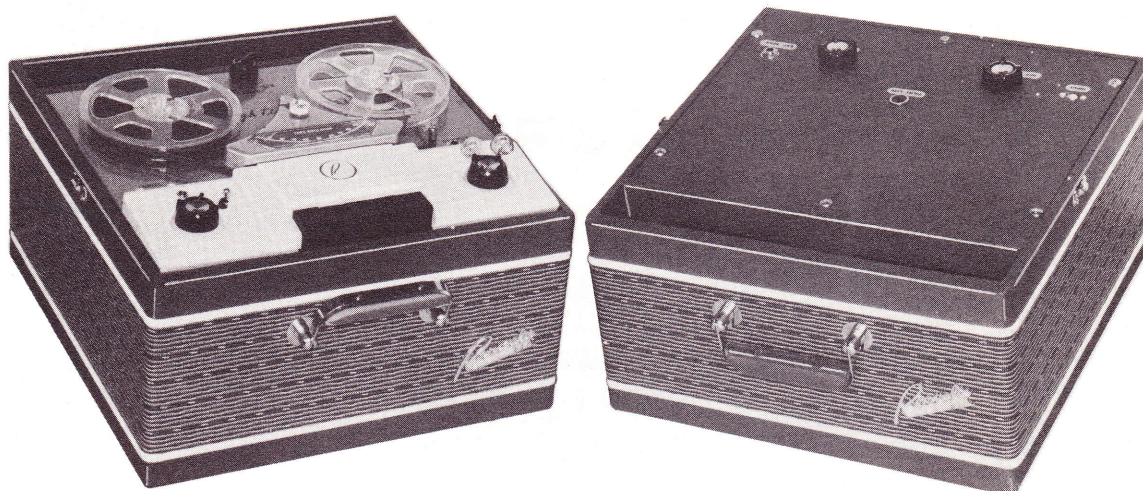
RECORDIO
MODEL 802RECORDIO
MODEL 802

GENERAL INFORMATION

The Recordio Model R-802 is a dual track monaural tape recorder and player, and in addition, will play two-track or four-track prerecorded stereophonic tapes.

The R-802 is equipped with a quarter-track head, a 3-watt amplifier into which a stereophonic preamplifier is incorporated, and two 4-inch speakers.

No additional amplification is necessary when using the stereophonic preamplifier to operate an external amplifier. The Model SA-801, also covered in this manual, contains speakers and a power amplifier that matches the R-802 tape recorder amplifier. The SA-801 is designed specifically for use with the R-802 for stereophonic playback.

This Recordio features pushbutton control for each tape transport mode. These modes are: Rewind, Record, Stop, Play, and Fast Forward.

Double-track recording is used, giving two full-length recordings on a reel of tape. Any size reel up to 7 inches can be used.

A neon record level indicator simplifies the record level setting. New recordings can be made on previously recorded tape since the erase head is automatically positioned when the RECORD button is pressed. Monaural recordings can be made from a radio, television receiver, or phonograph, in addition to those made directly from the microphone.

This recorder has two tape speeds, 7.50-inches per second, and 3.75-inches per second. Using both tracks of the tape, the recording times are as follows:

Reel Size	3.75" Speed	7.50" Speed
5" reel (600 ft.)	1 hour	1/2 hour
7" reel (1200 ft.)	2 hours	1 hour

The Recordio R-802 is designed to operate on 60-cycle, 115-volts, AC supply only. DAMAGE WILL RESULT IF CONNECTION IS MADE TO A DIRECT CURRENT (DC) LINE.

Manufactured By:

Recordio Corporation
Charlotte, Michigan

HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana



The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of CQ469

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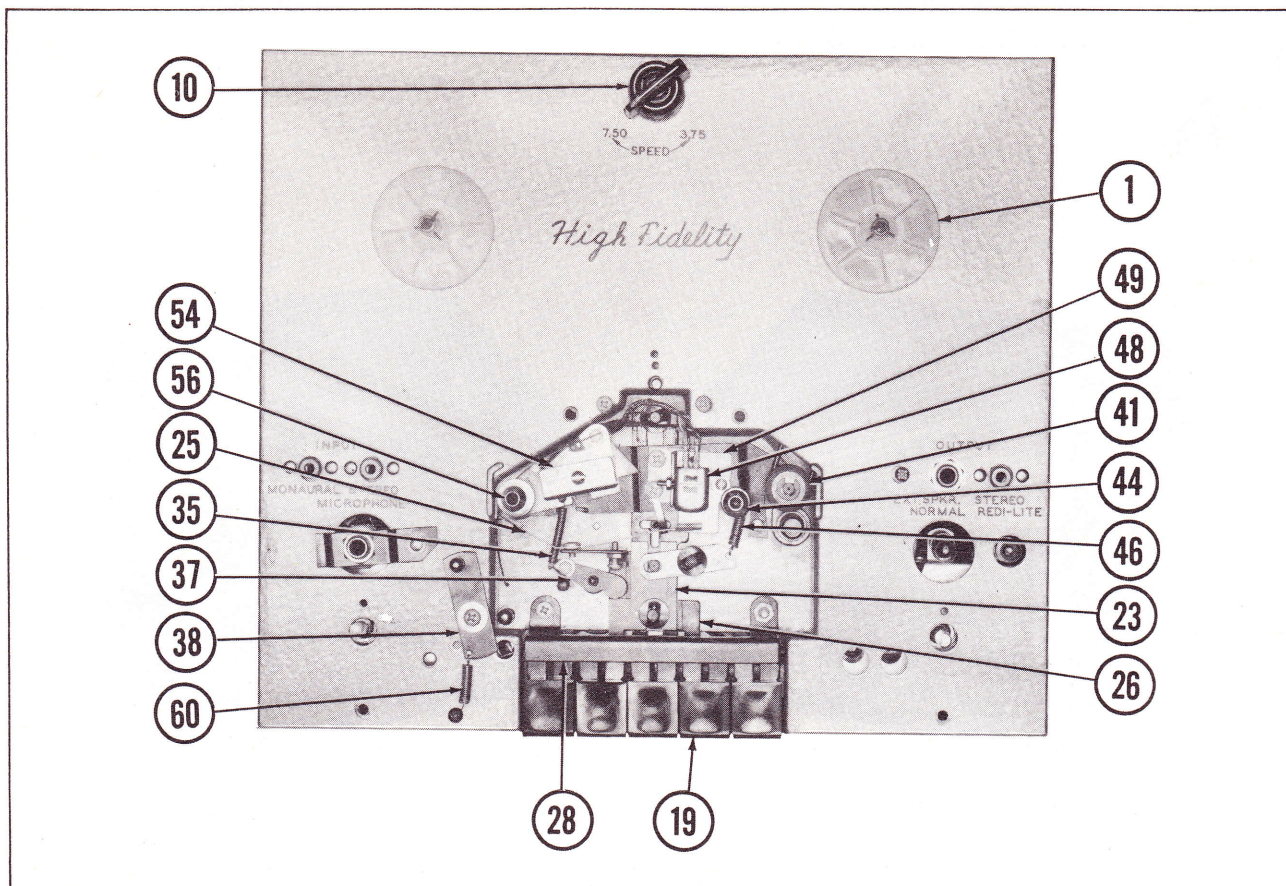


FIG.1 TOP VIEW OF MECHANISM WITH ESCUTCHEON REMOVED

FUNCTIONS OF CONTROLS & PUSHBUTTONS

Volume

Clockwise rotation of this control turns the Recordio "on" and regulates the volume for both the recording and playback operations.

Tone

Clockwise rotation of this control increases the treble response. Also, when turned clockwise, the speakers are muted when the recorder is in the Record mode. Complete counterclockwise rotation of this control provides a means to monitor recordings.

Speed

The speed control knob should point to 7.50 or 3.75 according to the speed desired. This Recordio has two tape speeds, 7.50-inches per second and 3.75-inches per second. In so far as quality of recording-reproduction is concerned, speed is an important factor. The higher the speed, generally, the greater will be the fidelity.

CAUTION: Do not turn the speed control knob unless the STOP button is depressed.

Tape Indicator

Set the Tape Indicator to zero by turning the knurled reset knob when starting to record or play back a reel of tape. If the reading is noted at various points in the tape travel, new program selections can

be indexed, or previously recorded selections can be located with great accuracy.

Rewind Button

This button is used to transfer tape rapidly from the take-up reel (right) to the supply reel (left).

Record Button

When depressed, the recorder will begin recording signals fed to the tape.

NOTE: The Record Lock must be turned before the Record Button can be depressed.

Stop Button

This button is used to stop tape travel after being in either the Play, Record, Forward, or Rewind modes. It is also a safety feature and must be pressed down when the recorder is not in use.

Play Button

This button starts the recorder and plays back any recording that is on the tape.

Forward Button

This button is used to transfer tape rapidly from the supply reel (left) to the take-up reel (right).

OPERATING INSTRUCTIONS

Preparing for Operation

1. Remove the AC power cord, reel of tape, empty reel, and the microphone from the rear storage compartment.
2. Depress the Stop button.
3. Plug the AC cord into a convenient wall receptacle of the proper rating.
4. Place the Speed knob in the 3.75 or 7.50 position.

CAUTION: Do not turn Speed control knob unless Stop button is depressed.

When the Forward or Reverse buttons are depressed, the Record and Play buttons are locked so they cannot be pressed down, with the possibility of spilling tape. The buttons should always be pressed down firmly until they latch. The Stop button must be depressed before changing functions or speeds of the recorder.

IMPORTANT: Always depress the Stop button when the Recorder is not in use.

Threading the Tape

1. Place a reel of tape on the supply pan (left) making sure the reel slots catch the protrusions of the pan.
2. Place an empty reel, the same size or larger, on the take-up pan (right). Again make certain the reel slots catch the protrusions of the pan.
3. Release the Stop button by pressing lightly on any one of the other buttons so that all buttons are in the release position. This releases the tape brakes, simplifying tape threading.
4. Unwind about 14-inches of tape from the supply reel. Hold a section of tape straight with both hands and insert tape in tape slot making sure the dull coated side faces rear of machine.
5. Insert the free end of the tape into one of the slots in the hub of the empty reel and turn it a few turns to secure the tape to the reel.

Recording from Microphone

1. Turn the On-Off-Volume control to the right until a click is heard and allow sufficient time for the Redi-Lite to glow.
2. Insert the microphone plug into the Microphone input jack.
3. Move the record lock (38) downward with the left hand. This releases the safety lock which prevents accidental erasure.
4. Depress the Record button, while holding the record lock (38) down with the left hand, until it latches.
5. Adjust the volume control until the record level indicator just flashes while speaking into the microphone.

NOTE: The tone control is disconnected when in the record position.

Recording from Radio, Television, or Phonograph

1. To record from a radio or television receiver, connect a patch cord with two alligator clips on one end across the voice coil of the radio or television speaker. Plug the other end into the monaural input jack.
2. To record from a phonograph, plug the phono plug into the monaural input jack.
3. Proceed as in "Recording from Microphone".

Speed Change Knob

The arrow on the knob should point to 7.50 or 3.75, according to the speed desired.

CAUTION: Do not operate the speed change knob while the unit is running. The stop button must be depressed first before changing speeds.

To Use Second Track

1. When all of the tape has been wound onto the take-up reel, depress the stop button.
2. Remove the take-up reel from the right take-up spindle and replace it with the empty reel.
3. Place the full reel of tape on the left supply spindle.
4. Thread the tape.
5. Proceed with the recording.

Playing Recordings

1. Turn the recorder on with the On-Off-Volume control knob.
2. Thread the tape.
3. Set the speed change knob (10) to the speed at which the recording was made.
4. Depress the play button.
5. Adjust the volume and tone controls to the desired listening level.

Fast Forward or Reverse

When a certain portion of the tape is to be played over, it is not necessary to rewind the entire tape. The tape will advance or reverse at a rapid speed to the desired place by depressing the forward or reverse button.

Tape Timer

If you wish to play back a certain recording, note the reading on the timer scale when the recording is being made or heard. Rewind or advance the tape to the number on the scale and then depress the stop button. Depress the play button and the desired re-

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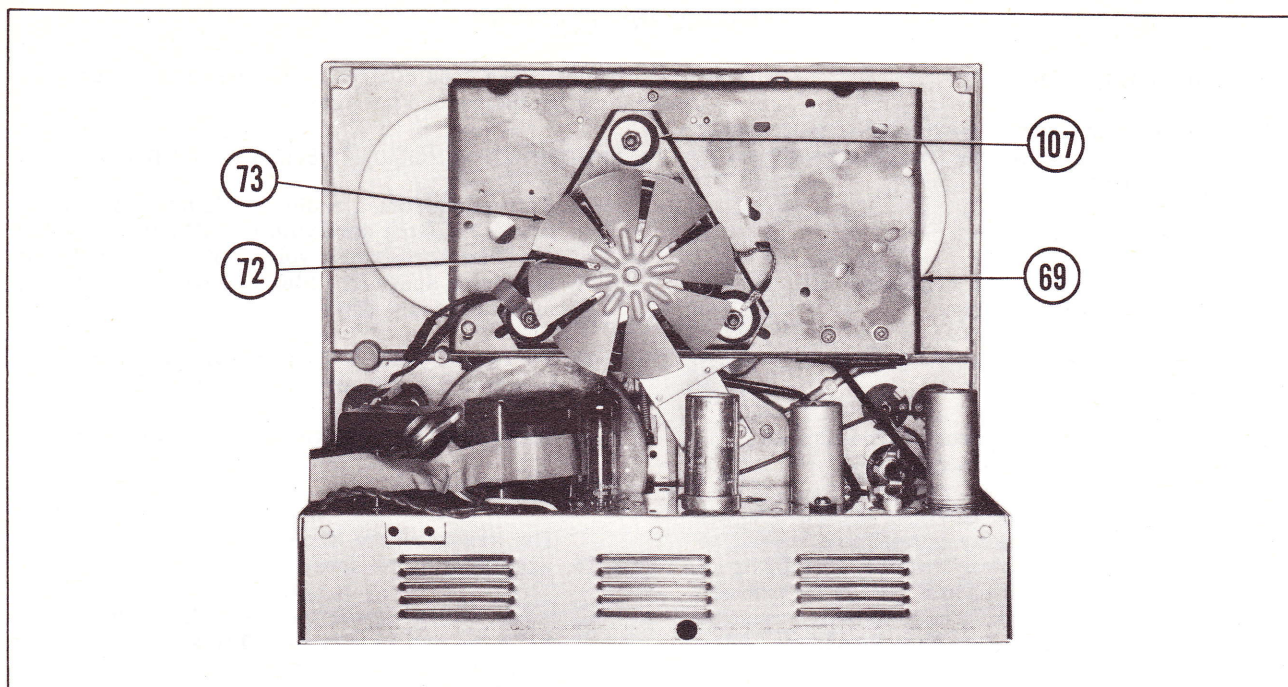


FIG.2 BOTTOM VIEW OF MECHANISM

cording will be played back.

When starting a new reel of tape, reset the timer pointer to "O" by rotating the reset knob. By starting at "O" on all tapes, the number location can be catalogued for each recording on any reel.

Erasing Recorded Material

The erase head is automatically positioned when the record button is depressed, erasing any previous recording before a new one is made. Tapes may be erased without putting new material on the tapes by depressing the record button and turning the volume control to its minimum position. One track is erased at a time. To erase the second track, reverse the reels and repeat the foregoing operation.

To Use Recorder as a Public Address System

Plug the microphone into the microphone input jack. Turn the monitor switch to the left. Turn the On-Off-Volume control to the On position. Depress the Record button and talk into the microphone.

CAUTION: When using as a public address system, keep the microphone away from the loudspeakers as far as possible to prevent feedback.

To Edit and Splice Tape

NOTE: Since it is impossible to edit and splice one track without affecting the other, recordings which are to be edited should be limited to one track only.

1. Tape may be edited by cutting out unwanted portions or by joining selections into another sequence. Announcements may be inserted between selections, etc. Unused sections can be spliced together for re-use.

2. For best results, cut the tape at a slight diagonal, join ends together with splicing tape on the glossy side and trim off any excessive width.

To Play Quarter-Track Stereophonic Tape

1. Thread the tape.
2. Connect the Stereo output jack to the input jack or terminals of an external amplifier.
3. Depress the play button and adjust the volume and tone controls of the recorder and external amplifier to the desired listening level and equal volume.
4. When the reel is completely played, reverse the reels; rethread the tape, and proceed as above.

To Play Stereophonic Records

1. Plug the stereo turntable output leads into the monaural-stereo input jacks.
2. Make certain the stop button is depressed.
3. Plug the external amplifier into the stereo output jack.
4. Turn the On-Off-Volume controls to the On position.
5. Adjust the volume and tone controls so they will be equal from each unit with the turntable running.

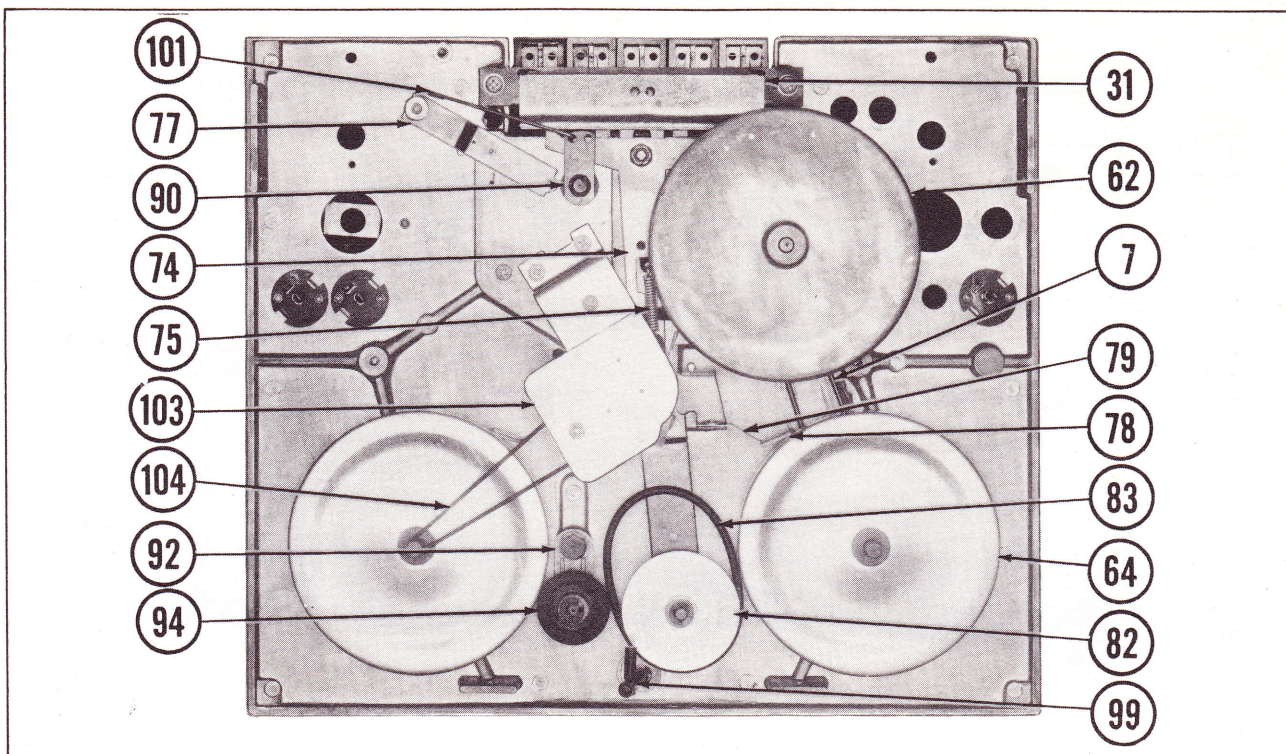


FIG.3 BOTTOM VIEW OF MECHANISM WITH DRIVE MOUNTING PLATE ASS'Y REMOVED

DISASSEMBLY

Removing the Recorder from the Case

1. Remove the front escutcheon (4).
2. Remove two screws on the top front and two screws from the rear of the recorder.
3. Lift recorder up and disconnect the speaker leads.
4. Lift the recorder out of its case.
5. Reverse the foregoing procedure to reassemble.

To Remove the Amplifier from Tape Transport

1. Unplug the head leads.
2. Remove the microphone and external speaker jacks.
3. Remove the leads from the input and stereo jacks.
4. Unsolder the motor leads.
5. Disconnect the record switch linkage.
6. Remove two screws from each side of the amplifier and lift amplifier from tape transport.

7. Reverse the foregoing procedure to reassemble.

To Remove SA-801 Amplifier from Case

1. Remove the screw, holding the line cord, in the storage compartment.
2. Remove six screws from the top of the control board.
3. Lift the amplifier from the case.
4. Reverse the foregoing procedure to reassemble.

To Remove SA-801 Amplifier from Control Board

1. Remove two screws from the input jack.
2. Remove the external speaker jack.
3. Unsolder the Redi-Lite leads.
4. Remove two hex nuts holding the amplifier to the control board.
5. Lift amplifier away from control board.
6. Reverse the foregoing procedure to reassemble.

CLEANING

Foreign matter should be cleaned from under the plastic pushbuttons occasionally. The pressure roller (41), recording head (48), and tape guide posts (44) and (56), should be cleaned occasionally with a

soft cloth and alcohol to remove the tape residue

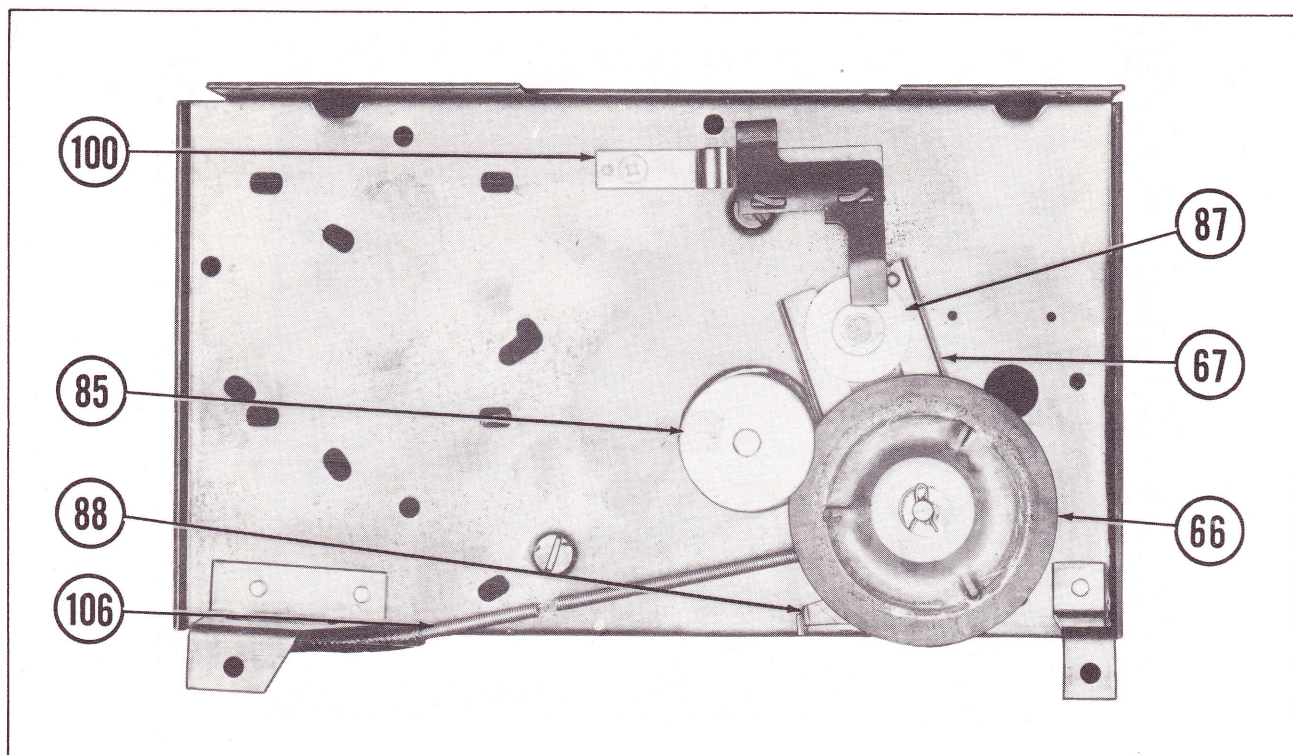


FIG.4 TOP VIEW OF DRIVE MOUNTING PLATE ASSEMBLY

LUBRICATION

All rotating parts are provided with oilite bearings and are lubricated before leaving the factory. If the recorder is disassembled for repair, clean all

sliding levers and lubricate with a drop of good grade motor oil.

ADJUSTMENTS

Record-Play Head

1. Remove the rear escutcheon (15) and the front escutcheon (4).
2. Thread an alignment tape or a good prerecorded tape on the recorder.
3. Adjust the controls as described under "Playing Recordings".
4. Adjust screw (47) to the right or left until the maximum high frequencies are obtained.

Pressure Pad

1. Remove front escutcheon (4).
2. Depress the Play button but do not turn recorder on.
3. Use a pencil type postal scale at the end of the pad and check the amount of pressure necessary to pull the pad away from the tape. The required pressure should be $1 \frac{3}{4}$ oz. $\pm$ $\frac{1}{4}$ oz.
 - (a) Adjust the record head pressure pad with the locked adjustment screw (36).
 - (b) Adjust the guide post pressure pad by bending the pressure padspring. It must be adjusted

for minimum pressure against the tape.

4. Depress the stop button after the adjustments are made.

Erase Head

1. Remove the rear escutcheon and check to see if the erase head (54) is parallel with the tape.
2. Check to see if the top edge of the tape coincides with the top end of the diagonal slot (junction of long diagonal slot and short vertical slot).
3. To adjust the tape level, loosen set screw (55) and rotate the tape guide post (56) up or down. Tighten set screw (55).

Brake Shoe

1. The brake shoes on brake spring (79) should clear the drums by approximately $\frac{1}{8}$ " with the pushbuttons in the up position.
2. Depress the stop button and observe the brake shoes. They must contact the drums at the same time and with equal pressure.
3. To adjust the brake shoes, bend the brake slide plate assembly.

TROUBLE CHART

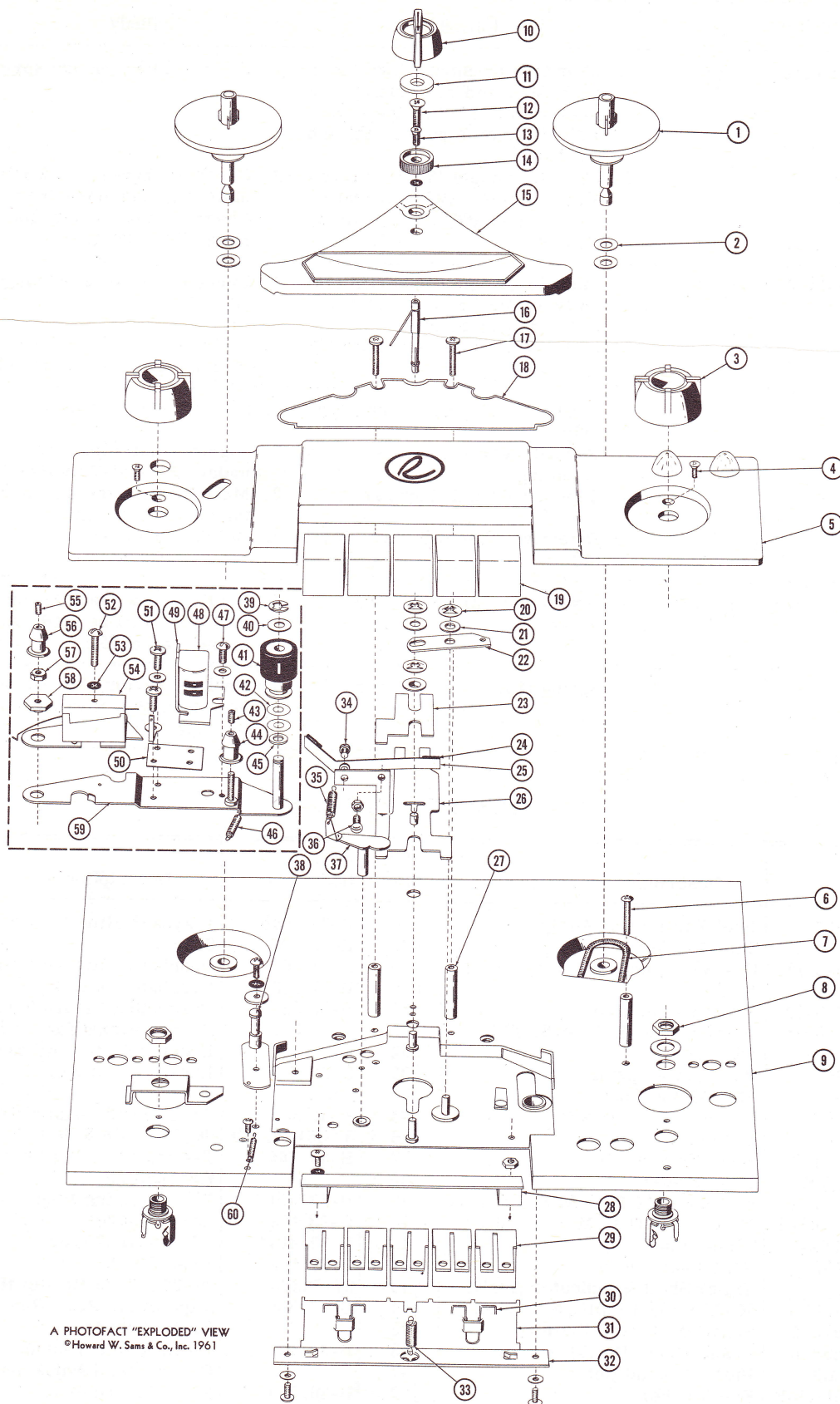
Symptom	Cause	Remedy
No drive in record or play-back.	1. Idler tension spring (106) loose or broken and not holding the idler wheel (66) in engagement with the motor pulley (85) and flywheel (62). 2. Idler slide plate (67) binding on slide bushing (87) preventing idler wheel (66) from sliding forward.	1. Replace idler tension spring (106). 2. Check for burrs on the idler slide plate (67) and slide bushing (87). Check to see if the idler slide plate (67) is bent.
No fast forward or reverse.	1. Idler lever tension spring (75) loose or broken and not actuating idler lever (81). 2. Idler drive belt (83) not properly connected.	1. Replace idler lever tension spring (75). 2. Make sure the idler drive belt (83) is in the grooves of the pulleys.
No record.	1. Pressure pad not adjusted properly. 2. Record head (48) loose on its mounting. 3. Tape not threaded properly. 4. Defective Record-Play head (48).	1. See "Pressure Pad Adjustment". 2. Tighten and adjust as described under "Record-Play Head". 3. Make certain the dull side of the tape faces the head. 4. Replace head (48).
Pushbuttons fail to latch into position.	1. Lock plate spring (33) loose or broken.	1. Replace lock plate spring (33) so lock plate will be held against the hinge bracket (31).
Does not erase.	1. Spring (35) loose or broken.	1. Replace spring (35) so the erase head is pulled forward to engage the tape.

MECHANICAL PARTS LIST

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	C-13.318	Reel Pan & Shaft Ass'y.	26	B-35.1045-1	Playback Slide Plate Ass'y.
2		Shim Washers	27	B-33.446	Spacer
3	C-13-254-15	On-Off-Volume and Tone Control Knob	28	B-19.858	Pushbutton Retainer Bracket
4	E-13-295-10	Front Escutcheon	29	B-19.876-1	Pushbutton Lever
5	57-1C-606-6	#6-32 x 3/8" B.H.M.S. Phil. Stl. Screw	30	B-31.337	Pushbutton Return Spring
6	B-31.351	Reel Drive Spring	31	B-19.859	Hinge Bracket for Pushbutton
7		Tape Guide Post	32	B-19.870	Locking Plate for Pushbuttons
8	48-2213-1	Hex Nut, 3/8-32 x 1/2	33	B-31-343	Lock Plate Spring
9	E-13.445-1	Baseplate	34		Screw
10	C-13.253-7	Speed Shift Knob	35	B-31.361	Erase Head Tension Spring
11	73-2254-6	Felt Washer	36	57-16B-613-0	#6-32 x 3/8 R.H.M.S.
12	57-6C-620-1	#6-32 x 1 1/4 R.H.M.S. Phillips	37	B-35.766	Record Actuating Lever Ass'y.
13	57-4C-405-5	#4-40-5/16 O.H.M.S. Phillips	38		Record Lock
14	B-32.302-2	Timer Knob	39	B-33.418-2	"E" Retaining Ring
15	D-13.292-2	Rear Escutcheon	40	B-28.163	Linen Washer
16	35.851	Timer Shaft & Indicator Ass'y.	41*	B-33.404*	*Pressure Roller
17	57-1C-618-1	#6-32 x 1 1/8 Phillips R.H.M.S.	42	B-28.163	Linen Washer
18	B-19.975-2	Rear Escutcheon Plate	43	57-3439-0	#6-32 x 3/16 Bristol Hd. Set Screw
19	B-13.258-8	Pushbuttons (Black)	44	B-32.309	Tape Guide Post (Right)
20	B-33.412	Push-On-Stud Nut	45		Fiber Washer
21	73-2241-148F	Flat Washer	46	B-31.360	Pinch Roller Tension Spring
22	B-19-881	Playback Actuating Lever	47		Record Head Adjusting Screw
23	B-19.868	Record Slide Plate	48	B-36.254	Play-Record Head
24	B-31.334	Pressure Pad	49	B-19.989	Play-Record Head Mtg. Bracket
25	B-19.892	Pressure Pad Spring	50	B-19.1564	Play-Record Head Shim
			51		Play-Record Head Mtg. Screw
			52	57-16B-613-0	Erase Head Mounting Screw

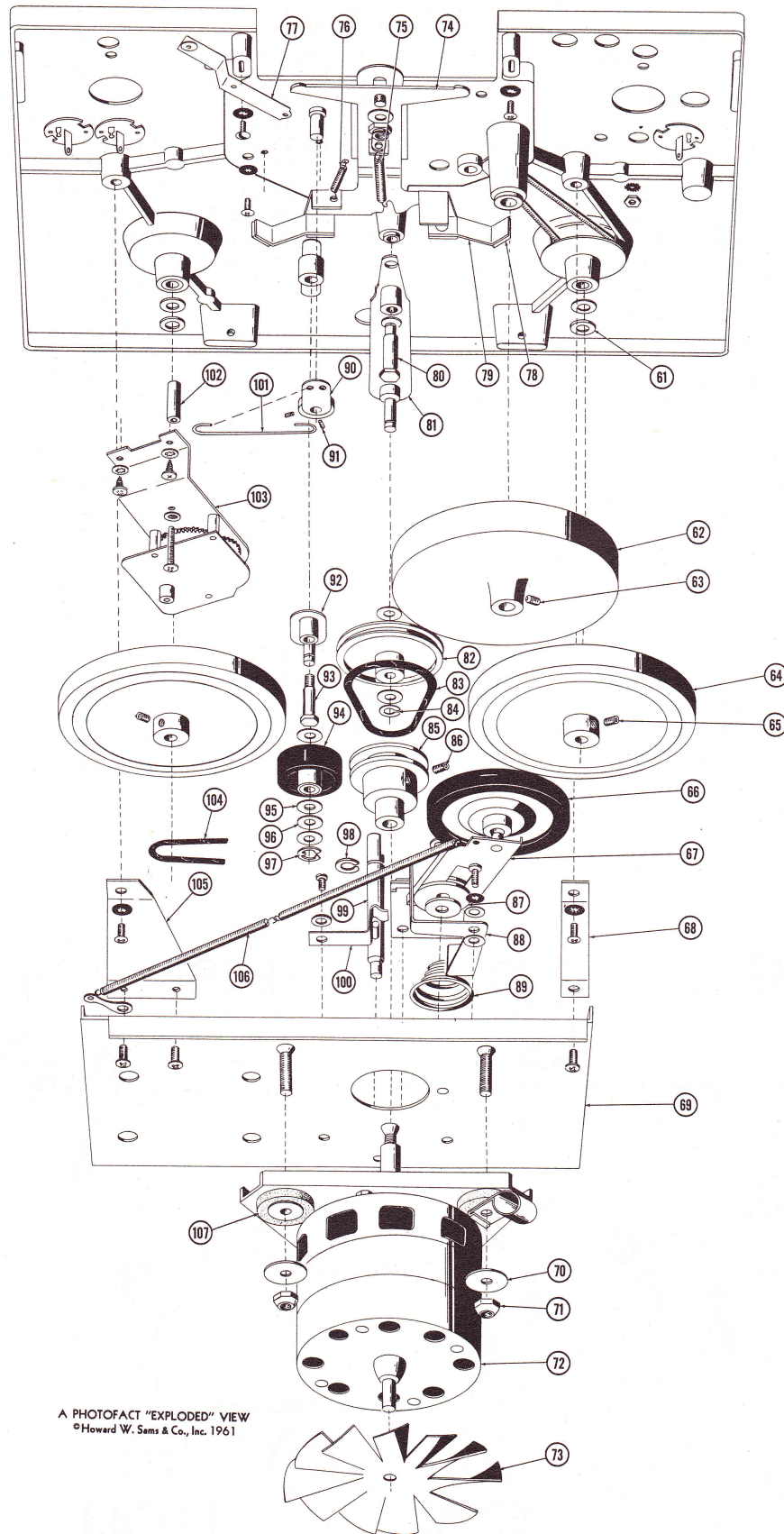
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A PHOTOFACT "EXPLODED" VIEW
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FIG.5A EXPLODED VIEW OF PARTS ABOVE BASE PLATE



A PHOTOFAC "EXPLODED" VIEW
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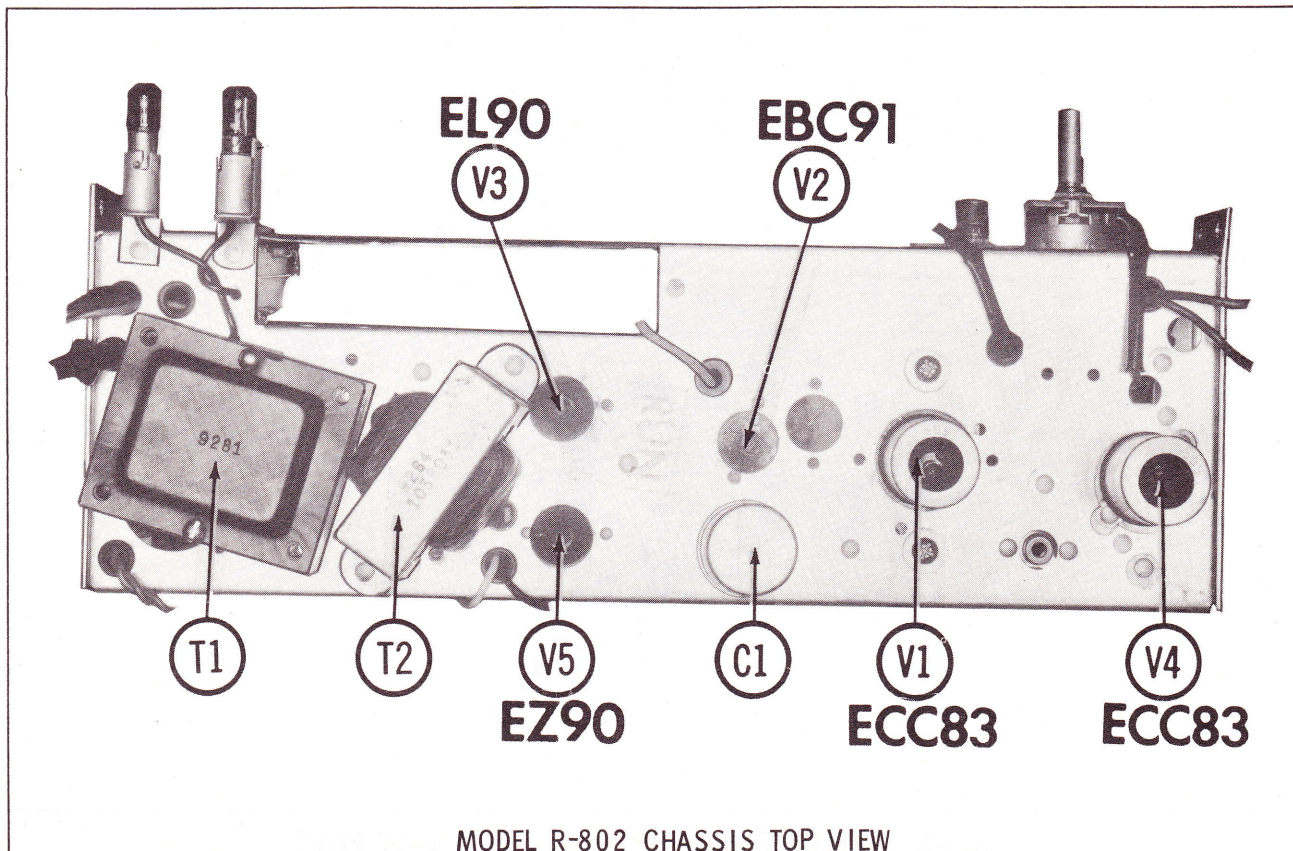
FIG.5B EXPLODED VIEW OF PARTS BELOW BASE PLATE

MECHANICAL PARTS LIST (CON'T.)

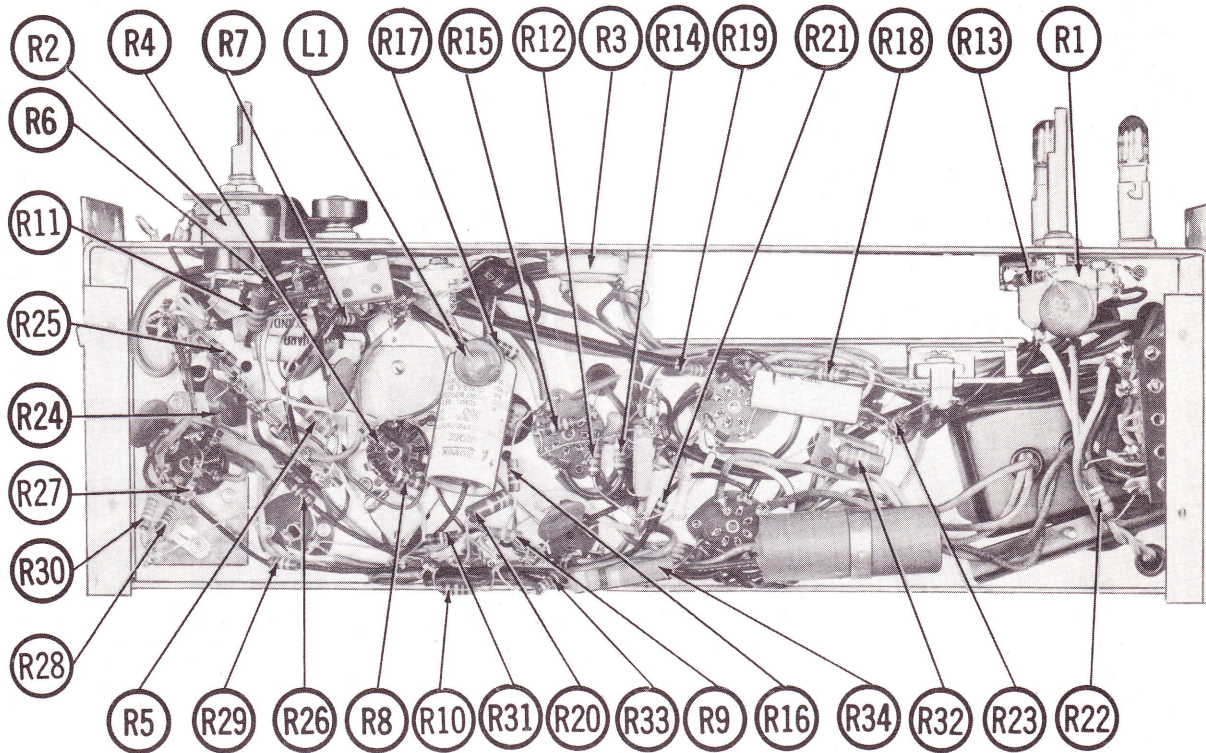
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
53	73-2233-5	Lockwasher	79	B-35.1070-1	Brake Spring Ass'y.
54	C-35.756-1	Erase Head	80	B-32.275	#8-32 H.H. Shoulder Screw
55	57-3439-0	#6-32 x 3/16 Bristol Hd. Set Screw	81	B-35.1051	Idler Lever Ass'y.
56	B-32.300	Tape Guide Post (Left)	82	B-32.367	Idler Drive Sheave
57	48-410-1	#6-32 Nut, Steel	83	B-28.181	Idler Drive Belt
58	B-32.336	Tape Guide Post Spacer	84	B-33.418-2	"E" Retaining Ring
59	C-19.1565-1	Pressure Roller Plate Ass'y.	85	B-32.288	Motor Pulley
60	B-19.849	Record Lock Tension Spring	86	57-3698-0	8-32 x 3/16 Bristol Head Set Screw
61	B-28.163	Linen Washer	87	B-32.264	Idler Slide Bushing
62	13.257-1	Flywheel	88	B-19.1431-1	Idler Throw-Out Lever
63	57-3698-0	#8-32 x 3/16 Bristol Hd. Set Screw	89	B-31.327	Idler Lift Compression Spring
64	C-35.1050-1	Brake Drim & Bushing Ass'y.	90	B-19.877	Switch Lever
65	57-3698-0	#8-32 x 3/16 Bristol Hd. Set Screw	91	57-3698-0	Set Screw
66*	*B-33.408	*Rubber Bonded Idler Wheel	92	B-19.873	Sub-Idler Plate
67	B-19.838	Idler Slide Plate	93	B-32.275	#8-32 H.H. Shoulder Screw
68	B-19.976-1	Angle Bracket for Mounting Drive Ass'y.	94	B-33.405	Sub Idler Wheel
69	D-35.1054-2	Drive Mounting Plate Ass'y.	95	73-2254-3	Felt Washer
70		Flat Washer	96		Flat Washer
71	48-409-1	Hex Head Elastic Stop Nut	97	B-33.418-2	"E" Retaining Ring
72	D-36.153	Motor, Round Type	98	B-33.407-1	Retaining Ring
73		Fan	99	B-32.293	Speed Control Shaft
74	B-35.1046	Shift Plate Ass'y.	100	B-19.961	Speed Control Shaft Detent Spring
75	B-31.339	Idler Lever Tension Spring	101	B-31.333	Switch Arm Link
76	B-31.338	Brake Return Spring	102	B-33.118	Spacer
77	B-19.906	Record Interlock	103	B-33.445	Gear Train
78	B-31.335	Brake Pad, Felt	104	B-28.175	Counter Belt
			105	B-19.862	Drive Mounting Plate Bracket
			106	B-31.324	Idler Tension Spring
			107	B-28.194-2	Shock Mount

* Pressure Roller WALSCO Part No. 1457

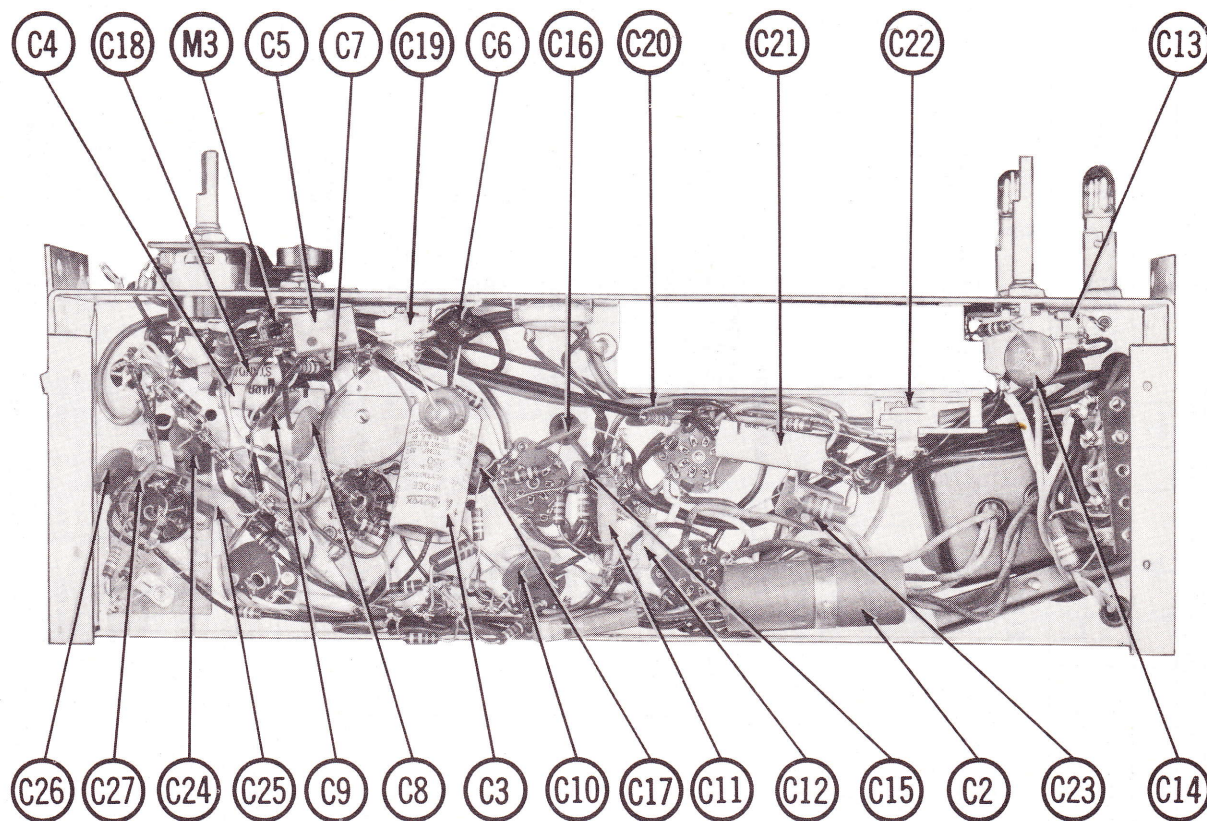
* Rubber Bonded Idler Wheel WALSCO Part No. 1430



MODEL R-802 CHASSIS TOP VIEW



MODEL R-802 CHASSIS BOTTOM VIEW-RESISTOR & INDUCTOR IDENT.



MODEL R-802 CHASSIS BOTTOM VIEW-CAPACITOR & MISC. IDENT.

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MODEL R-802 ELECT. PARTS LIST AND DESCRIPTIONS **TUBES**

GENERAL ELECTRIC			RAYTHEON			SYLVANIA		
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V1	Left Channel Preamp. - Bias Osc.	ECC83/12AX7	V4	Right Channel Preamp.	ECC83/12AX7			
V2	Left Channel AF Amp.	EBC91/6AV6	V5	Rectifier	EZ90/6X4			
V3	Left Channel Output	EL90/6AQ5						

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						NOTES
	CAP.	VOLT.	RECORDIO PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	
C1A	30	250	B-5. 437	AFH3-89	C0670	FP329.5	TMT-3262	TVL-3565	
B	30	250							
C	30	25							
C2A	10	200	B-5. 444	PRS2300	BBRD2225	TCD52	TDLD-26	TVA-2722	Note 1
B	10	200							Note 1
C3	20	250		PRS1570	BR2025	TC55	TD-20-250	TVA-1508	Note 1

Note 1. C3 may be a 10mfd section of C2 (C2 Part #B-5.480).

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCOR PART No.	MALLORY PART No.	SPRAGUE PART No.
C4	.05 200V		P288N-05	DD-503	CUB2S5	4DP-3-503	GEM-415	2TM-S50
C5	470 10%		1469-00047		5R5T47	CM-19B-471K	MCJ244	MS-347
C6	820 10%		1469-00082		5R5T82	CM-19B-821K	MS-382	
C7	.001		SI 1000	D6-102	BYA10D1	CCD-102	B-210	5HK-D10
C8	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C9	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C10	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C11	470 10%		1469-00047		5R5T47	CM-19B-471K	MCJ244	MS-347
C12	.0015		SI 1500	D6-152	BYA10D15	CCD-152	B-215	5HK-D15
C13	100		BPD-0001	DD-101	L10TI	CCD-101	GP310	10TS-T10
C14	.003		DI-3000	DD-302	BYA10D3	CCD-302	GP230	10TS-D30
C15	100		SI 100	D6-101	L10TI	CCD-101	GP310	10TS-T10
C16	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C17	220		SI 220	D6-221	L10T22	CCD-221	B-322	10TS-T22
C18	.0047 400V		P488N-0047	D6-472	CUB6D47	6DP-1-472	GEM-6247	6TM-D47
C19	3-35	#B-4.144	BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C20	.01		P688N-047	DD-503	CUB6S47	6DP-3-473	GEM-6147	6TM-S47
C21	.047 600V							
C22	5-70	#B-4.146	1469-00022	TCZ-220	22R5T22	CM-19B-221	CNO-322	10TS-T22
C23	220 10%		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C24	.01		1469-00005	TCZ-50	22R5Q5	CM-19B-500K	MCB225	MS-45
C25	50 10%		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C26	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C27	.01							

Recordio Part Number.

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESISTANCE	WATTS	RECORDIO PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	
R1A	1meg	1/2	C-8. 227-2	BT-74	A47F5-1meg	Q19-137X	UT-443	Volume
B	500K Tap							
C	Shaft			Not Req.	FS-3	Not Req.	Not Req.	
R2A	Switch			Not Req.	SWE-12	US-26	US-26	Power Off-On
B	250K	1/2	C-8. 249-1	B-51	A47-250K-Z	Q13-130	U44	Tone (Note 1)
C	Shaft			Not Req.	FS-3	Not Req.	Not Req.	
R3A	Switch			Not Req.	SWE-12	76-1	US-26	Monitor Off-On
B	500Ω	1/2	C-8. 240	TT-4	B47-500-S	BU-103	PTA52L	Hum Balance
	Shaft			Not Req.	Not Req.	TM4	Not Req.	

Note 1. Some versions may use Part #C-8. 231-1. See R36 for replacements.

RESISTORS

All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN TV PART No.	REMARKS			IRC PART No.	WORKMAN TV PART No.	REMARKS
R4	1.5meg				R20	330Ω 1W			
R5	8200Ω 1W				R21	120K			
R6	330K				R22	33Ω			
R7	680K				R23	330K			
R8	4.7meg				R24	1000Ω			
R9	150K				R25	10meg			
R10	22K				R26	220K			
R11	22K 1W				R27	1meg			
R12	68K				R28	2.2meg			
R13	100K				R29	220K			
R14	470K				R30	5600Ω			
R15	6.8meg				R31	100K			
R16	180K				R32	270K 1W			
R17	47K				R33	4700Ω			
R18	470K				R34	470Ω 2W			
R19	1.5meg								

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		RECORDIO PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	Workman TV PART No.	
L1	Bias Osc.	B-1.557					60KC

TRANSFORMER (POWER)

ITEM No.	RATING			REPLACEMENT DATA					NOTES
	PRI.	SEC. 1	SEC. 2	RECORDIO PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T1	117V @ .3A	440VCT @ .040A DC	6.3V @ 1.9A	C9. 281					

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	RECORDIO PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T2	5500Ω	3-4Ω	C-9. 264	A-2935	A-3877①	24S51①	S-5X	① Drill new mtg. holes.

SPEAKER

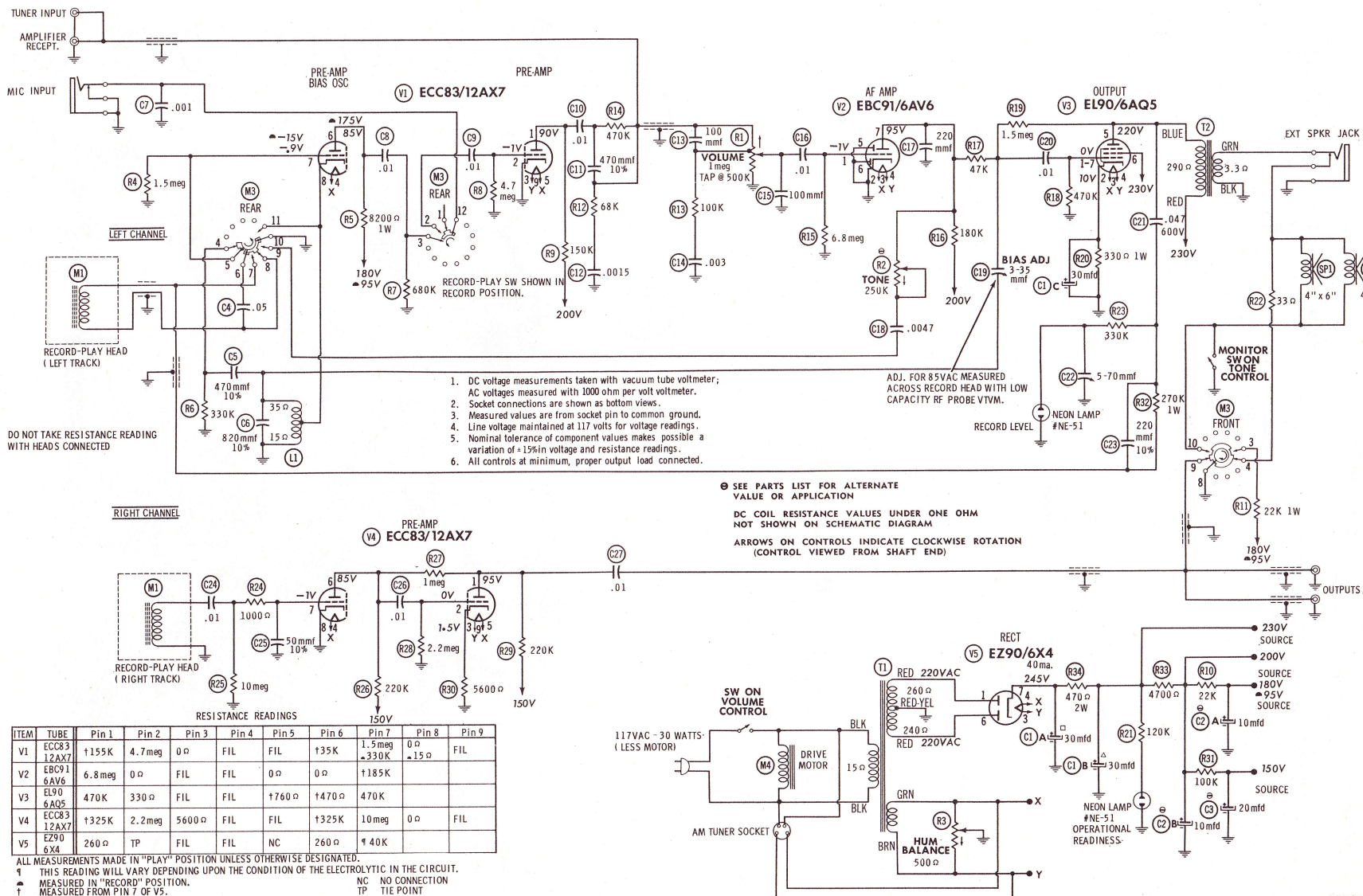
ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	RECORDIO PART No.	QUAM PART No.	
SP1	4"x 6"	PM	6-8Ω	30. 354-2	46A07Z6. 4	
SP2	4"	PM	6-8Ω	30. 353-2	4A07Z8	

MISCELLANEOUS

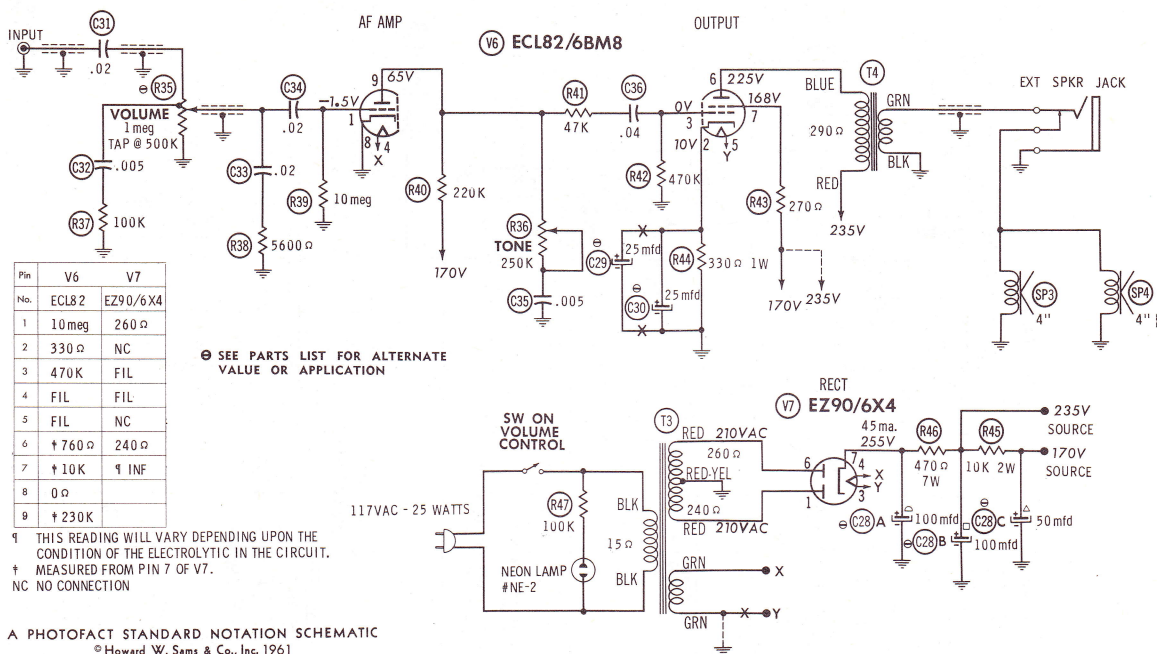
ITEM No.	PART NAME	RECORDIO PART No.	NOTES
M1	Head	B36-254 (or) B36-258	Record (World Magnetics)
M2	Head	C-35. 756-1	Record (Michigan Magnetics)
M3	Switch	B-11. 247	Erase Assy. (Permanent Magnet Type)
M4	Motor	35-1053-1	Function (Rotary Wafer Type)
M5	Microphone	36-195	Drive Assy.

WIRING DATA

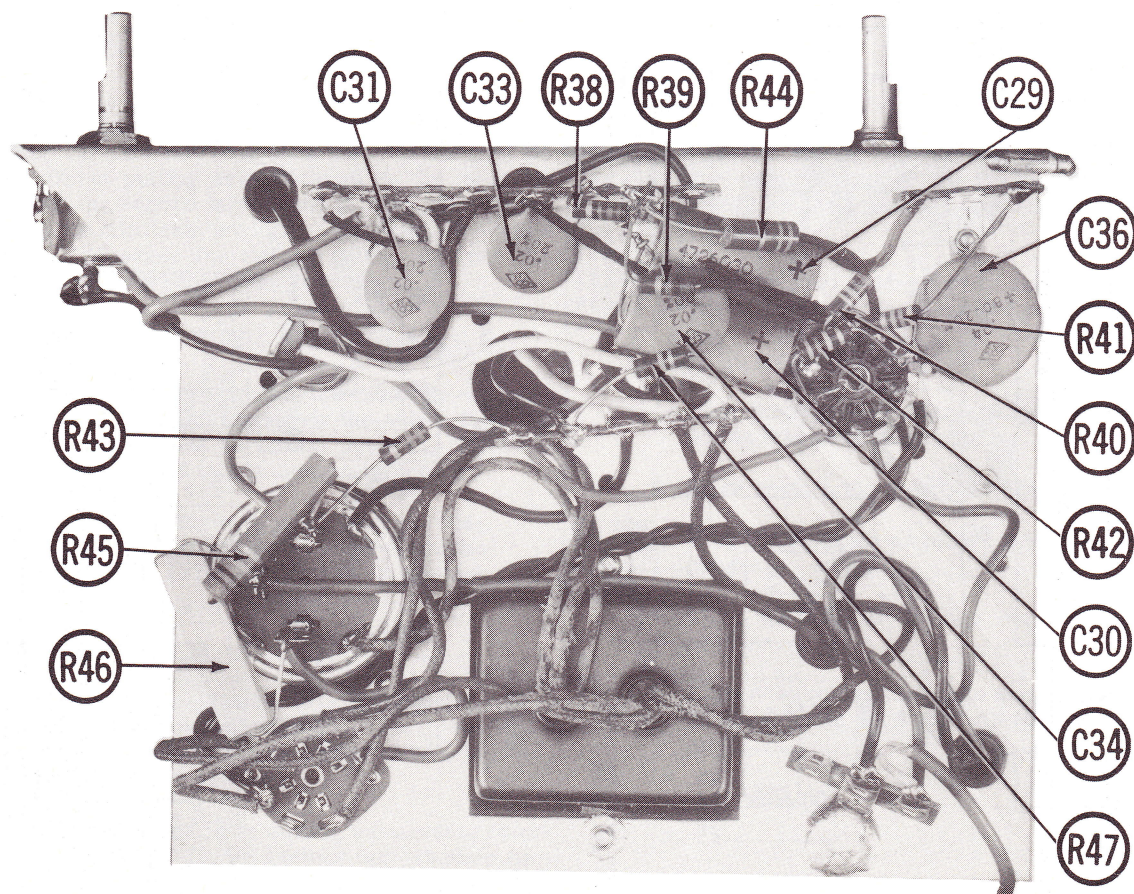
General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid) Available in Ten Colors
 8524 (Stranded) Available in Ten Colors
 Power Cord Use BELDEN No. 1765-B (6 Ft. Length)
 1725-K (7½ Ft. Length)



MODEL R-802 SCHEMATIC
 MODEL 802
 RECORDIO



MODEL SA-801 SCHEMATIC



MODEL SA-801 CHASSIS BOTTOM VIEW

MODEL SA-801 ELECT. PARTS LIST

MODEL SA-801 CHASSIS-TOP VIEW

TUBES

GENERAL ELECTRIC • RAYTHEON • SYLVANIA •			
ITEM No.	USE	TYPE	ITEM No. USE TYPE
V6	Right Channel AF Amp. - Right Channel Output	ECL32/6BM8	V7 Rectifier E290/6X4

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA				
		CAP. VOLT.	RECORDIO PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No. PYRAMID PART No. SPRAGUE PART No. NOTES
C28A	100	300	C-5, 421-11	FRS1260	BBR25-25	WP219 TC69 TVLS-3584* Note 1
C28B	100	300		FRS1260	BBR25-25	TC26 TD-25-25 TVA-1205 Note 2
C29	25	25			BBR25-25	TC26 TD-25-25 TVA-1205 Note 2
C30	25	25			BBR25-25	TC26 TD-25-25 TVA-1205 Note 2

Note 1. In some versions C28A and C28B are reversed.
 Note 2. In some versions C29 and C30 are combined in one 50mfd unit (Part #B-5, 464, 2).
 * Not normally in distributor's stock. Available thru distributor on order to manufacturer.

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA				
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENDO PART No.	MALLORY PART No. SPRAGUE PART No.
C31	.02		BPD-02	DD-203	BYB6S2	CCD-203	B-120 SHK-S20
C32	.005		BPD-005	DD-502	BYA10D5	CCD-502	B-250 SHK-D50
C33	.02		BPD-02	DD-203	BYB6S2	CCD-203	B-120 SHK-S20
C34	.02		BPD-02	DD-203	BYB6S2	CCD-203	B-120 SHK-S20
C35	.005		BPD-005	DD-502	BYB6S2	CCD-502	B-250 SHK-S20
C36	.04			DD-403	BYB6S4	6DP-3-403	GP140

CONTROLS

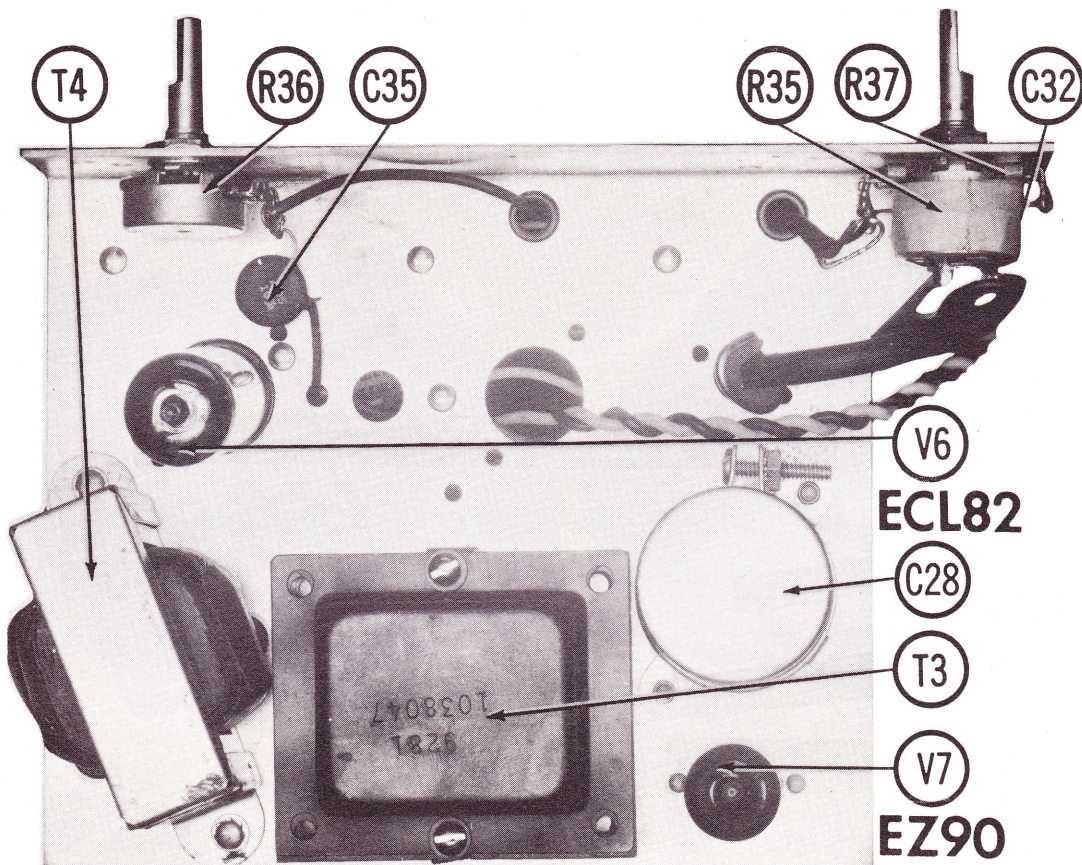
ITEM No.	RATING	REPLACEMENT DATA				INSTALLATION NOTES
		RESIST. ANCE	RECORDIO PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	
R35A	1meg	500K Tap	C-8, 227-2	BT-74	A47F5-1meg	Volume (Note 1)
B	500K	Tap		Not Req.	FS-3	
R36A	500K	Tap	C-8, 231-1	KE-1	SWE-12	Power Off-On
B	500K	Tap		Not Req.	B-51	Tone
				Not Req.	A47-250K-Z	
				Not Req.	FS-3	

Note 1. Some versions may use Part #C-8, 227-14.

RESISTORS

All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	RATING	REPLACEMENT DATA			REPLACEMENT DATA		
		RESIST. ANCE	RECORDIO PART No.	CENTRALAB PART No.	ITEM No.	RATING	REMARKS
R37	100K				R43	270Ω	
R38	500Ω				R44	330Ω 1W	
R39	10K				R45	10K 2W	
R40	220K				R46	470Ω 1W	
R41	47K				R47	100K	
R42	470K						



ITEM No.	RATING			REPLACEMENT DATA					NOTES
				RECORDIO PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T3	117V @ .25A	SEC. 1 420VCT @ .045A	SEC. 2 6.3V @ 1.1A	C9, 281					

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
			RECORDIO PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
	PRI.	SEC.						
T4	5500Ω	3-4Ω	C9, 264	A-2935	A-3877①	24S51①	S-5X	① Drill new mtg. hole(s).

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				RECORDIO PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SP3	4"	PM	6-8Ω	30.353-2	4A07Z8	
SP4	4"	PM	6-8Ω	30.353-2	4A07Z8	

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in Ten Colors 8524 (Stranded) Available in Ten Colors
Power Cord	Use BELDEN No. 1765-B (6 Ft. Length) 1725-K (7½ Ft. Length)
Low-Loss Shielded Lead (Interconnecting)	Use BELDEN No. 8401
Phono Pick-up Arm Cable	Use BELDEN No. 8430 (Two Conductor - Twisted)